species of the genus, which extend through pretty well the entire Australian region. The term " flying " as applied to these and the other " flying " genera is of course an exaggeration. The animals cannot fly upwards; they can only descend in a skimming fashion, the folds of skin breaking their fall. -P. *breviceps* is perhaps the best - known species. The body is 8, the tail 9 inches long.

PetauToides seems to be chiefly distinguished from *Petaurus* by the fact that, as in its ally *Dactylopsila,* the tail is partly naked terminally. In *Petaurus* and *Gymnobelideus* the tail is bushy to the very end, including its extreme tip below.

A third genus of Flying Phalangers is the minute *Acrobates,* which has a distichous tail like that of *Distaecliwrus.* It is not more than 6 inches in length including the tail. As to these Flying Phalangers it is exceedingly instructive to observe that the same method of " flight" has been apparently evolved three times; for the three genera are each of them specially related to a separate type of non-flying Phalanger. The same observation can be made about the Flying Squirrels, *Anomalurus* and *Sciuropter^.* The dental formula is 11- C -J- Pm -§- M -§-. The ears are thinly clad with hair. There are four teats.

Sub-Fam. 2. Piiaseolarctinae,—The Koala, or Native Bear, *Phascolarctos cinereus,* is the only representative of its sub-family. It is, like the Wombat, aberrant in the lack of an obvious tail. The absence of this appendage is curious in an arboreal creature whose near allies have a long and prehensile one. The structure of the Koala was investigated by the late Mr. "W. A. Forbes.[1] There are some unexpected points of likeness to the "Wombat: thus they agree in the absence of the tail, in the structure of the stomach, and in the great subdivision of the lobes of the liver. The brain, however, is smooth, and the caecum is exceedingly large and complicated in structure., that of the Wombat being short. That both animals have cheek-pouches is perhaps due to similar habits of temporarily storing masses of food. This animal has

only eleven pairs of ribs. The tail has only seven or eight verte-
bra, and these have no chevron-bones. >

A peculiarity of the skull is seen in the great size of the alisphenoid bulla, which **is** comparable in size and appearance with, that of the Pig, As in the Kangaroos, the atlas is incomplete below.

* **On. some Points in the Anatomy of the Koala," *JProc. Zool. Soc.* I8S1. *r*>. lfto